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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,002	04/16/2004	Katsuro Tsukamoto	KIYO-44(KUP-04-20)	9225

7590 05/29/2008
Curt Harrington
Suite 250
6300 State University Drive
Long Beach, CA 98015

EXAMINER

DUONG, THO V

ART UNIT	PAPER NUMBER
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3744

MAIL DATE	DELIVERY MODE
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05/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/826,002	TSUKAMOTO, KATSURO	
	Examiner	Art Unit	
	Tho v. Duong	3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6, 8-12, 14-24, 26-30, 32-36, 38-42, 44-48, 50-54, 57 and 62-65 is/are pending in the application.
- 4a) Of the above claim(s) 2-6, 8-12, 14-24, 26-30, 32-36, 38-42, 44-48, 50-54 and 57 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 62-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/26/08 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 62-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (US 6,027,807) in view of Kashima et al. (US 6,152,453) and Imaoka et al. (US 6,290,777). Inoue discloses (figures 4, 8 and column 7, line 66- column 8, line 13) a heat release sheet comprises of an expansive graphite sheet (11) and a reticulated body, wherein the reticulated body is a metal grid overlapping on both sides of the expansive graphite sheet (11); the reticulated body is used as an anchor surface for a resin layer and a synthetic resin film attached on. Inoue et al further discloses that the heat release sheet can be used as a heat sink. Inoue does not disclose that the reticulated body comprises of metal wire. Kashima discloses (figures 2,5, 8,9 and 13) a heat release sheet comprises of an expansive graphite sheet (3) and a reticulated body overlapping

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both side of the graphite sheet by a rolling process, wherein the reticulated comprises of metal wires for a purpose of providing an alternative reinforcing structure for the expanded graphite sheet. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Kashima's teaching in Inoue's device for a purpose of providing an alternative reinforcing structure for the expanded graphite sheet. Furthermore, both Inoue and Kashima do not disclose that the device is washed with a negative reduction water. However, washing a device with a negative oxidation reduction potential is not patentable over the prior art. In particular, reference to Imaoka discloses (column 4, lines 45-62) a solution of negative oxidation reduction potential has been used a cleaning agent in cleaning the electrical parts for a purpose of preventing particles from being attached again to the surface of the part and enable sure cleaning even at lower temperature compared with the conventional method and device. it would have been obvious to one having ordinary skill in the art at the time the invention was made to use Imaoka's teaching in the combination device of Kashima and Inoue for a purpose of preventing particles from being attached again to the surface of the part and enable sure cleaning even at lower temperature compared with the conventional method and device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho v. Duong whose telephone number is 571-272-4793. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tyler J. Cheryl can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tho v Duong/
Primary Examiner, Art Unit 3744